

COPY OF PAPERS
ORIGINALLY FILED

1652

Please type a plus sign (+) inside this box → ☐

PTO/SB/21 (6-98)
Approved for use through 09/30/2000. OMB 0651-0031
Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

TRANSMITTAL FORM <i>(to be used for all correspondence after initial filing)</i>	Application Number	10/040,204
	Filing Date	19 December 2001
	First Named Inventor	Kari I. Kivirikko
	Group Art Unit	1652
	Examiner Name	Not yet assigned
Total Number of Pages in This Submission	Attorney Docket Number	FP0203.4 CON

TECH CENTER 1600/2900

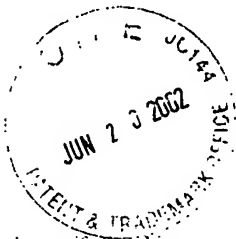
RECEIVED
JUN 25 2002

ENCLOSURES (check all that apply)		
<input type="checkbox"/> Fee Transmittal Form <input type="checkbox"/> Fee Attached <input type="checkbox"/> Amendment / Response <input type="checkbox"/> After Final <input type="checkbox"/> Affidavits/declaration(s) <input type="checkbox"/> Extension of Time Request <input type="checkbox"/> Express Abandonment Request <input checked="" type="checkbox"/> Information Disclosure Statement <input type="checkbox"/> Certified Copy of Priority Document(s) <input type="checkbox"/> Response to Missing Parts/Incomplete Application <input type="checkbox"/> Response to Missing Parts under 37 CFR 1.52 or 1.53	<input type="checkbox"/> Assignment Papers (for an Application) <input type="checkbox"/> Drawing(s) <input type="checkbox"/> Licensing-related Papers <input type="checkbox"/> Petition Routing Slip (PTO/SB/69) and Accompanying Petition <input type="checkbox"/> Petition to Convert to a Provisional Application <input type="checkbox"/> Power of Attorney, Revocation Change of Correspondence Address <input type="checkbox"/> Terminal Disclaimer <input type="checkbox"/> Small Entity Statement <input type="checkbox"/> Request for Refund	<input type="checkbox"/> After Allowance Communication to Group <input type="checkbox"/> Appeal Communication to Board of Appeals and Interferences <input type="checkbox"/> Appeal Communication to Group (Appeal Notice, Brief, Reply Brief) <input type="checkbox"/> Proprietary Information <input type="checkbox"/> Status Letter <input checked="" type="checkbox"/> Additional Enclosure(s) (please identify below): PTO Form 1449
Remarks		

SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT	
Firm or Individual name	Leanne C. Price Reg. No. 42,090
Signature	
Date	14 June 2002

CERTIFICATE OF MAILING	
I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to: Assistant Commissioner for Patents, Washington, D.C. 20231 on this date: 14 June 02	
Typed or printed name	Carolyn C. Cairns
Signature	
Date	14 June 02

Burden Hour Statement: This form is estimated to take 0.2 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.



I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to Assistant Commissioner for Patents, Washington, D.C. 20231 on 14 June 2002.

Carolyn C. Cairns

Printed: Carolyn C. Cairns

COPY OF PAPERS
ORIGINALLY FILED

TECH CENTER 1600/2900

JUN 25 2002

RECEIVED

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Inventors: Kivirikko and Pihlajaniemi Assignee: FibroGen, Inc.

Title: SYNTHESIS OF HUMAN PROCOLLAGENS AND COLLAGENS IN RECOMBINANT DNA SYSTEMS

Serial No. 10/040,204

Filing Date: 19 December 2001

Examiner: Not yet assigned

Group Art Unit: 1652

Assistant Commissioner for Patents
Washington, D.C. 20231

**INFORMATION DISCLOSURE STATEMENT
UNDER 37 C.F.R. 1.97(b)**

Sir:

Pursuant to 37 C.F.R. 1.56, 1.97, and 1.98, Applicants wish to call to the attention of the Examiner the enclosed "List of References Cited by Applicants" (PTO Form 1449). In accordance with 37 C.F.R. 1.98(d), copies of the references are not provided as all of the references were cited or submitted in prior applications U.S. Patent Application Serial No. 09/260,582, filed 1 March 1999, and U.S. Patent Application Serial No. 08/940,094, filed 29 September 1997, from which the present application claims priority under 35 U.S.C. 120. Applicants reserve the right to antedate any reference in accordance with standard procedure.

Citation of the documents is not to be construed as an admission that the documents are necessarily prior art with respect to the present application. In addition, this submission is

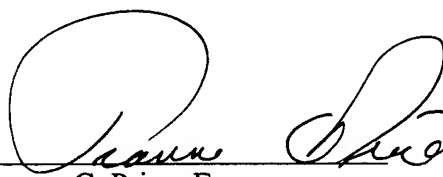
understood to complement the results of the Examiner's own independent search. Citation of the documents shall not be construed as a representation that a search has been made or that the cited items are inclusive of all the relevant and material citations that may be available publicly. Any NCBI or other report included on the attached list may not have an accurate date for prior art purposes. Some of the documents may have markings thereon. No significance is meant to be attached to the markings. Applicants respectfully request that the cited documents be considered by the Examiner and that an initialed copy of the PTO Form 1449 be returned to Applicants.

If there are any questions regarding this communication, please call the undersigned at 650-866-7200.

Applicants believe that no fee is due with this communication. If, however, the Commissioner determines that a fee is due, the Commissioner is hereby authorized to charge any necessary fees to Deposit Account No. 50-0811. **This form is enclosed in duplicate.**

Respectfully submitted,
FibroGen, Inc.

DATE: 14 June 2002



Leanne C. Price, Esq.
Reg. No. 42,090

FibroGen, Inc.
225 Gateway Boulevard
South San Francisco CA 94080
Main: 650-866-7200
Direct: 650-866-7254
Facsimile: 650-866-7204

**INFORMATION DISCLOSURE
STATEMENT BY APPLICANT**
(Use as many sheets as necessary)

JUN 20 2002

Application Number 107040,204
Filing Date 19 December 2001
First Named Inventor Kari I. Kivirikko
Group Art Unit 1652
Examiner Name Not yet assigned
Attorney Docket No. FP0203.4 CON

RECEIVED
JUN 25 2002
ECHO CENTER 1600/2300

Sheet 1 of 5

U.S. PATENT DOCUMENTS

EXAMINER INITIALS*	CITE NO.	U.S. PATENT DOCUMENT		NAME OF PATENTEE OR APPLICANT OF CITED DOCUMENT	DATE OF PUBLICATION OF CITED DOCUMENT MM-DD-YY	PAGES, COLUMNS, LINES, WHERE RELEVANT PASSAGES OR RELEVANT FIGURES APPEAR
		Number	Kind Code (if known)			
	1	5,405,757		PROCKOP et al.	04-11-95	
	2	5,593,859		PROCKOP et al.	01-14-97	

COPY OF PAPERS
ORIGINALLY FILED

FOREIGN PATENT DOCUMENTS

EXAMINER INITIALS*	CITE NO.	FOREIGN PATENT DOCUMENT			NAME OF PATENTEE OR APPLICANT OF CITED DOCUMENT	DATE OF PUBLICATION OF CITED DOCUMENT MM-DD-YY	PAGES, COLUMNS, LINES, WHERE RELEVANT PASSAGES OR RELEVANT FIGURES APPEAR	T
		Office	Number	Kind Code (if known)				
	3	WO	WO 93/07889	A1	Thomas Jefferson University	04-29-93		

EXAMINER

DATE CONSIDERED

EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP Section 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

**INFORMATION DISCLOSURE
STATEMENT BY APPLICANT**
(Use as many sheets as necessary)

JUN 20 2002

Application Number 10/040,204
Filing Date December 2001
First Named Inventor Kari I. Kivirikko
Group Art Unit 1652
Examiner Name Not yet assigned
Attorney Docket No. FP0203.4 CON

TECH CENTER 1600/2900

JUN 25 2002

RECEIVED

Sheet 2 of 5

OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS

EXAMINER INITIALS*	Cite No.		T
	4	ABEDIN et al. (1982) Biosci. Rep. 2:493-502.	
	5	ADAMS (1989) Am. J. Respir. Cell Mol. Biol. 1:161-168.	
	6	ALA-KOKKO et al. (1989) Biochem. J. 260:509-516.	
	7	AUBERT-FOUCHER et al. (1992) J. Biol. Chem. 267:15759-15764.	
	8	AYAD et al. (1998) <u>The Extracellular Matrix Facts Book</u> , 2 nd edition, Ayad, Boot-Handford, Humphries, Kadler, and Suttleworth, eds. Academic Press, San Diego, CA, pp.43-125.	
	9	BENTZ et al. (1983) Proc. Natl. Acad. Sci. U.S.A. 80:3168-3172.	
	10	BENYA and PADILLA (1986) J. Biol. Chem. 261:4160-4168.	
	11	BERG and PROCKOP (1973) J. Biol. Chem. 248:1175-1182.	
	12	BRAZEL et al. (1987) Eur. J. Biochem. 168:529-536.	
	13	BREWTON and MAYNE (1994) Extracellular Matrix Assembly and Structure, pp. 129-170.	
	14	BRUCKNER and PROCKOP (1981) Anal. Biochem. 110:360-368.	
	15	BURGESSON and NIMNI (1992) Clin. Orthop. 282:250-272.	
	16	BYERS et al. (1974) Biochemistry 13:5243-5248.	
	17	CARMICHAEL et al. (1977) J. Biol. Chem. 252(20):7163-7167.	
	18	DUANCE et al. (1984) Biochem. J. 221:885-889.	
	19	DUBLET et al. (1989) J. Biol. Chem. 264:13150-13156.	
	20	ELSTOW and WEISS (1983) Collagen Rel. Res. 3:181-193.	
	21	FUKAI et al. (1994) Methods in Enzymology 245:3-28.	
	22	FURUTO and Miller (1987) Methods in Enzymology 144:41-61.	
	23	GEDDIS and PROCKOP (1993) Matrix 13:399-405.	

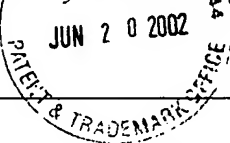
COPY OF PAPERS
ORIGINALLY FILED

EXAMINER

DATE CONSIDERED

EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP Section 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

**INFORMATION DISCLOSURE
STATEMENT BY APPLICANT**
(Use as many sheets as necessary)



Application Number T0/040,204

Filing Date December 2001

First Named Inventor Kari I. Kivirikko

Group Art Unit 1652

Examiner Name Not yet assigned

Attorney Docket No. FP0203.4 CON

TECH CENTER 1600/2900

JUN 25 2002

RECEIVED

Sheet 3 of 5

OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS

EXAMINER INITIALS*	Cite No.		T
	24	GRANT et al. (1988) The Control of Tissue Damage, Glauert ed., Elsevier Science Publishers, Amsterdam, pp. 3-28.	
	25	HAMALAINEN et al. (1991) Genomics 11(3):508-516.	
	26	HELAAKOSKI et al. (1989) Proc. Natl. Acad. Sci. U.S.A. 86:4392-4396.	
	27	HELAAKOSKI et al. (1994) J. Biol. Chem. 269(45):27847-27854.	
	28	HOJIMA et al. (1994) J. Biol. Chem. 269(15):11381-11390.	
	29	HOYHTYA et al. (1984) Eur. J. Biochem. 141:477-482.	
	30	HUEBNER et al. (1992) Genomics 14:220-224.	
	31	INOGUCHI et al. (1995) J. Biochem. 117:137-146.	
	32	JUVONEN et al. (1992) J. Biol. Chem. 267(34):24700-24707.	
	33	KADLER et al. (1990) Ann. NY Acad. Sci. 580:214-224.	
	34	KADLER et al. (1987) J. Biol. Chem. 260:15969-15701.	
	35	KAGAN (1994) Path. Res. Pract. 190:910-919.	
	36	KAPOOR et al. (1986) Biochemistry 25:3930-3937.	
	37	KENYON et al. (1993) J. Biol. Chem. 268(25): 18435-18437.	
	38	KIELTY et al. (1991) J. Cell. Sci. 99:797-807.	
	39	KIELTY et al. (1993) "The Collagen Family: Structure, Assembly And Organization In The Extracellular Matrix," <u>Connective Tissue And Its Heritable Disorders, Molecular, Genetic, And Medical Aspects</u> , Royce, P. M. and B. Steinmann eds., Wiley-Liss, NY, pp. 103-147.	
	40	KIVIRIKKO et al. (1967) Analytical Biochem. 19:249-255.	
	41	KIVIRIKKO and MYLLYLA (1982) Methods in Enzymology 82:245-304.	
	42	KIVIRIKKO and MYLLYLA (1987) Methods in Enzymology 144:96-114.	
	43	KIVIRIKKO et al. (1989) FASEB J. 3:1609-1617.	
	44	KIVIRIKKO (1993) Ann. Med. 25:113-126.	

COPY OF PAPERS
ORIGINAL FILED

EXAMINER

DATE CONSIDERED

EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP Section 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

**INFORMATION DISCLOSURE
STATEMENT BY APPLICANT**
(Use as many sheets as necessary)

Application Number T0/040,204
Filing Date 9 December 2001
First Named Inventor Kari I. Kivirikko
Group Art Unit 1652
Examiner Name Not yet assigned
Attorney Docket No. FP0203.4 CON

TECH CENTER 1600/2900

JUN 25 2002

RECEIVED

OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS

EXAMINER INITIALS*	Cite No.	COPY OF PAPERS ORIGINALLY FILED	T
	45	KIVIRIKKO et al. (1994) J. Biol. Chem. 269:4773-4779.	
	46	KIVIRIKKO et al. (1992) "Hydroxylation of Proline and Lysine Residues in Collagens and Other Animal and Plant Proteins" in <u>Post-Translational Modifications of Proteins</u> , Harding and Crabbe, eds. CRC Press, Boca Raton, FL, pp. 1-51.	
	47	KIVIRIKKO (1995) Principles of Medical Biology, Vol. 3 Cellular Organelles and the Extracellular Matrix, Bittar and Bittar eds., JAI Press, Greenwich, Great Britain, pp. 233-254.	
	48	KOIVU et al. (1987) J. Biol. Chem. 262:6447-6449.	
	49	KUIVANIEMI et al. (1988) Biolchem J. 252:633-640.	
	50	LI et al. (1993) J. Biol. Chem. 268(12):8825-8834.	
	51	LUCKOW and SUMMERS (1989) Virology 170:31-39.	
	52	LUNSTRUM et al. (1986) J. Biol. Chem. 261(19):9042-9048.	
	53	LUNSTRUM et al. (1992) J. Biol. Chem. 267(28):20087-20092.	
	54	MARIANI et al. (1992) Matrix 12(3):242-248.	
	55	MAYNE and BREWTON (1993) Current Opinion in Cell Biology 5:883:890.	
	56	MCGRATH et al. (1995) Nat. Genet. 11(1):83-86.	
	57	MILLER and RHODES (1982) Methods in Enzymology 82:33-64.	
	58	MURAGAKI et al. (1994) Biol. Chem. 269:4042-4046.	
	59	MYERS et al. (1994) J. Biol. Chem. 269:18549-18557.	
	60	MYERS et al. (1992) Proc. Natl. Acad. Sci. U.S.A. 89:10144-10148.	
	61	MYLLYLA et al. (1977) Eur. J. Biochem. 80:349-357.	
	62	OH et al. (1994) Genomics 19:494-499.	
	63	OH et al. (1994) Proc. Natl. Acad. Sci. U.S.A. 91:4229-4233.	
	64	PAN et al. (1992) Proc. Natl. Acad. Sci. U.S.A. 89:6565-6569.	
	65	PARKKONEN et al. (1988) Biochem. J. 256:1005-1011.	
	66	PIHLAJANIEMI et al. (1987) EMBO J. 6(3):643-649.	
	67	PIHLAJANIEMI and TAMMINEN (1990) J. Biol. Chem. 265:16922-16928.	

EXAMINER

DATE CONSIDERED

EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP Section 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

**INFORMATION DISCLOSURE
STATEMENT BY APPLICANT**
(Use as many sheets as necessary)

JUN 20 2002

Application Number T0/040,204
Filing Date 9 December 2001
First Named Inventor Kari I. Kivirikko
Group Art Unit 1652
Examiner Name Not yet assigned
Attorney Docket No. FP0203.4 CON

TECH CENTER 600/2900

JUN 25 2002

RECEIVED

OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS

EXAMINER INITIALS*	Cite No.		T
	68	PIHLAJANIEMI and REHN (1995) Prog. Nucleic Acid Res. Mol. Biol. 50:225-262.	
	69	PROCKOP and KIVIRIKKO (1984) N. Engl. J. Med. 311(6):376-386.	
	70	PROCKOP and KIVIRIKKO (1995) Annu. Rev. Biochem. 64:403-434.	
	71	PROCKOP, 31 March 1995, NCBI Entrez Database, GenBank No. GI 30057 (Genbank Accession No. X14420).	
	72	REDDY et al. (1994) Bioch. Biophys. Res. Commun. 205(1):381-388.	
	73	REHN et al. (1994) J. Biol. Chem. 269(19):13929-13935.	
	74	REHN and PIHLAJANIEMI (1994) Proc. Natl. Acad. Sci. U.S.A. 91:4234-4238.	
	75	REHN and PIHLAJANIEMI (1995) J. Biol. Chem. 270(9):4705-4711.	
	76	RYAN et al. (1990) Genomics 8:41-48.	
	77	SCORER et al. (1994) Bio/Technology 12:181-184.	
	78	SOININEN et al. (1987) FEBS Lett. 225:188-194.	
	79	SUMMERS and SMITH (1987) Tex. Agric. Exp. St. Bull 1555:1-56.	
	80	TIKKA et al. (1991) J. Biol. Chem. 266(26):17713-17719.	
	81	TUDERMAN et al. (1975) Eur. J. Biochem. 52:9-16.	
	82	VAN DER REST et al. (1993) Adv. Mol. Cell. Biol. 6:1-67.	
	83	VEIJOLA et al. (1994) J. Biol. Chem. 269(43):26746-26753.	
	84	VUORI et al. (1992) Proc. Natl. Acad. Sci. U.S.A. 89:7467-7470.	
	85	WATT et al. (1992) J. Biol. Chem. 267(28):20093-20099.	
	86	WU et al. (1987) Biochem. J. 248:373-381.	
	87	WU et al. (1992) J. Biol. Chem. 267(34):24199-24206.	
	88	YAMAGUCHI et al. (1992) J. Biochem. 112:856-863.	
	89	YOSHIOKA et al. (1992) Genomics 13:884-886.	

EXAMINER

DATE CONSIDERED

EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP Section 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

COPY OF PAPERS
ORIGINALLY FILED